PALMETTO AVIATION

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FAA Airway Facilities Wins National Award

Columbia Facility is Sector of the Year

"Cas" Castleberry, FAA Regional Administrator congratulates Jim Weaver of the Columbia Airway Facility at the awards ceremony.

With family and friends cheering them on, the Columbia Airway Facility Sector became the nation's best at a ceremony honoring their accomplishment.

The FAA's Airway Facility Sector Office in Columbia was selected the nation's top out of hundreds of other applications.

The 1990 Sector of the Year Award was based on numerous criteria including facility performance, personnel development, minority staffing, safety programs, and cost-effective programs.

Attending the ceremony were many of FAA's top brass including representatives from the Regional and Washington offices. In his opening remarks, Jim Weaver praised his co-workers and talked of the team work that enabled the sector to obtain this recognition.

Weaver also cited the efficiency of the sector saying it was as close to perfect as possible, "the Columbia Airway Facilities Sector has gone from a 99.46 percent efficiency rating to a 99.87 percent rating." Meaning, people can rely on the facilities to be operational at least 99.87 percent.

"We had great planning and great work that allowed us to preplan for Hurricane Hugo," Weaver added. "Getting this award is quite an honor, but without team work it would never have been awarded."

He thanked his co-workers for making this award a reality, and Weaver became emotional when he turned to his wife and thanked all of the spouses and family members for their support during some very trying times.

Bob Waddle, executive director of Columbia Metropolitan Airport, stepped in to finish Weaver's prepared remarks. The audience gave all of the Sector employees a standing ovation for their great achievement.

Waddle spoke of the tremen-

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Cellular Phones & Aircraft -- A Combustible Combination

Do you carry a cellular telephone with you when you fly? If you do, and you use the telephone in flight, you may be endangering the flight and creating havoc for other cellular telephone users. You are also violating a Federal Communication Commission (FCC) policy, which prohibits the use of cellular telephones in flight.

The FCC rule prohibits the use of cellular telephones in flight to avoid the possibility of wide-area interference with the cellular telephone system. The cellular system was designed as a limited-range, ground-based, mobile-telephone system using shared frequencies. Because of the use of shared frequencies, an airborne cellular telephone call can cause interference not only with other local calls, but it can cause

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PALMETTO AVIATION is an official publication of the South Carolina Aeronautics Commission. It is designed to inform members of the aviation community, and others interested in aviation, of local developments in aviation and aviation facilities, and to keep readers abreast of national and international trends in aviation.
The Aeronautics Commission is a state agency created in 1935 by the South Carolina General Assembly to foster and promote air commerce in the state.

From the Director's Desk

Having survived my first 100 days as Director, I believe it's time to give you some of my views on Aviation in the state and where I think the Aeronautics Commission will be headed in the next few years. Undoubtedly, the biggest problem that we all face is adequate funding, so that appears to be a good place to start.

The nation's continuing deficit, the recent recession, and South Carolina's current budget dilemma have all of us at the Commission carefully watching each dollar to make sure we are getting the most for our money. Tight times are upon us and positive, innovative management is called for.

If aviation is to prosper in South Carolina we must focus our planning, carefully articulate our case, and manage each dollar spent as if it were our last. We must ensure we know, and more importantly, show the cost/benefit of each project and make our decisions based on the very best return for our investment. To that end, the Aeronautics Commission has dedicated itself to providing you the greatest support in a variety of areas.

In aviation development, the Economic Impact Study continues to be an important tool in showing how aviation contributes to the local economy. It's hard to refute facts and figures and the Impact Study provides just that information you need to sell your project. We can also provide detailed briefings or presentations for your Council or Commission. Education is also an important area, particularly with our young people. Every year we have about 4000 school kids tour the Aeronautics Commission. You can do the same with your airport or FBO. It's a low cost way to serve the community and win aviation advocates at the same time. This summer, we sponsored our first Summer Intern Program where aviation businesses in Columbia hired twelve teenagers as summer employees. The program was well received by the kids, parents, and sponsors. Both of these programs have local applicability and we would be happy to provide start-up assistance.

John P. Park

In Airport Development, we have sought to improve our ties with the FAA Southern Region. Frequent dialogue with Cas Castleberry, Steve Brill, and Sam Austin convince them that we are part of the team and continue to make them aware of our funding needs. We are working together to avoid problems before they start and using this same approach in preparing for the Airport Conference in November. We have tried to identify problems we all face and then bring qualified speakers and exhibitors that can supply answers and ideas.

In short, the Aeronautics Commission is the source of complete, up to date information and total support, for Aviation. We want to join you, side-by-side, in working to improve and expand aviation in this state. You will see this in action at the Airport Conference in November. I hope to see you there.

John Park

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Hawthorne FBO Ranks 3rd in U.S.

Charleston, S.C., based Hawthorne Corporation's new fixed base operation at Washington-Dulles International Airport has been ranked third best in North America.

The ranking came as a result of an annual survey of over 14,000 pilots done by Aviation International News, a leading industry publication.

The magazine ranked 281 FBOs in the U.S. and Canada by giving points in four categories. Hawthorne-Dulles, with a point total of 8080 was third behind Cinema Air of Carlsbad, Ca., with 8108 points and Citijet at Dallas, Tx. with 8102.

Pilots rated ramp and line service, passenger amenities, pilot amenities, and facilities. Hawthorne was one of only seven companies to receive excellent ratings in every category.The FBO ranked highest among operations in the Washington/Baltimore area and was the only area FBO to make the top 25.

Dean Harton, President of Hawthorne Corporation expressed his pleasure at the ranking. "This is particularly gratifying in that we only opened last September. Harton went on to credit the project team that developed Hawthorne-Dulles and the facility General Manager, David Brinson.

Hawthorne-Dulles is a member of the Hawthorne Group of Companies which has additional businesses in Florida, Georgia, Kentucky and South Carolina.

FCC Extends Radio Tolerance Deadline

In response to efforts by the Aircraft Owners and Pilots Association and other aviation groups, the Federal Communications Commission (FCC) has extended the deadline for requiring aircraft communication radios to meet a proposed future frequency stability tolerence of .003 percent or 30 parts per million to January 1, 1997.

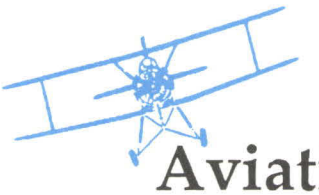
"This is good news for aircraft owners and pilots working to hold down the cost of flying, and entirely reasonable for the many aircraft seldom operated where 25 kilohertz (kHz) frequency spacing will be a factor," says Phil Boyer, President of the 300,000-member AOPA.

"It is estimated that the cost to the general aviation community of modifying or replacing the estimated 93,000 affected radios could be as much as $232.5 million. Given the burden that general aviation users are already faced with, this expense is both unwarranted and unnecessary.

Boyer added that most of the affected radios are mainly installed in single-engine aircraft that are operated within the U.S. and not flown for hire.

He said most of the radios certified to older tolerances are used in relatively uncongested airspace where 25 kHz channel assignments or the potential for interference with 25 kHz frequencies will be rare.

The Experimental Aircraft Association, General Aviation Manufacturers Association, and Helicopter Association International joined in urging the FCC to modify these requirements.



Aviation Calendar

August 18
Breakfast Club
Marion, S.C.
Sponsored by the Marion County Civil Air Patrol

August 25
Breakfast Club
Shiflet Field
Marion, NC

September 1
Blue Angels
Shriners Air Show
Donaldson Air Park

September 1
Jefferson Flying Club
Louisville, GA

September 6,7 & 8
50th Reunion
Southern Aviation School
Woodward Field
Camden, S.C.

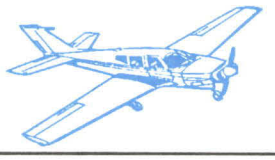
September 13, 14 & 15
Breakfast Club
Hilton Head, S.C.
Hosted by Hilton Head Composite Squadrom

September 29
Breakfast Club
Newberry Airport

October 4, 5 & 6
Annual Fly-In
EAA Chapter 8
Woodward Field
Camden, SC

October 13
Breakfast Club
East Cooper Airport
Mount Pleasant, SC

November 13-15
14th S.C. Airports Conference
Sheraton Downtown Hotel
For more info: 1- 800-922-0574



Careers in Flying are Looking Up

Jobs for pilots are up and expected to conitnue in that direction for the next 10 years. With World War II and Korean pilots hired by the airlines nearing retirement and the corporate, commuter, and commercial segments of aviation growing, the demand is at an all-time high. Meanwhile, the military is producing a declining percentage of those pilots each year, leaving private flight schools and universities to fill the need. Consider these facts:

✔The airlines are predicting that between 52,000 and 62,000 new pilots will be hired in the next 10 years. In 1989, the airlines hired more than 13,000 new pilots.

✔With more companies using General Aviation aircraft for business, corporate aviation is growing between 3 percent and 5 percent a year.

✔New pilots are also needed for the commuter and regional segments of the aviation industry, which are growing at more than 10 percent a year.

✔An increasing percentage of pilot training is professionally oriented. In fact, more and more pilots with civilian backgrounds are being hired by the airlines. Commercial and air transport pilot licenses and instrument rating issuances have increased dramatically in the past three years.

✔The average income for corporate pilots is $55,000 a year. The average for commercial pilots is $90,000 a year.

✔More than 40,000 women earned a pilot's license in1990. Slightly more than 52,000 women earned commercial licenses the same year. The number of female licensed pilots is up 33 percent, and the number of women with commercial licenses is up 27 percent in the past decade.

✔Many pilot employers in the airline, corporate, and General Aviation segments are recruiting female and minority pilots at competitive salaries. For example, one-tenth of the United Airlines' new pilot hires were women. Overall, nearly four percent of all new airline pilots hired in 1989 were female.

✔A 1988 national research study showed that in 3.6 million households expressed interest and thought they had the ability to learn to fly.

✔People who want information about careers in aviation can call: The Future Aviation Professionals of America at 1-800-JET-JOBS or The Aircraft and Pilots Association at 1-800-USA-AOPA.

New Videotape Promotes Aviation

Video will be coming to you soon

One of the most significant reports on aviation in South Carolina is the Economic Impact Study which compiled information vital to aeronautics.

The report was highlighted at the 1990 S.C. Airports Conference and revealed that aviation is a billion dollar industry in the state.

From the statistics gleaned from the Economic Impact Study a new videotape was produced. It is a slick 9-minute VHS tape that shows just how important aviation is to the economy of South Carolina.

The tape was designed so large and small airports could present it at local functions of their chambers of commerce and development boards to promote their airport's economic contributions to the area.

A copy will be mailed to each county airport.

FAA Administrator Commits Agency to General Aviation

Speaking at the first ever General Aviation forecast Conference, Federal Aviation Administrator James Busey told participants the high cost of flying is to blame for the current slump in general aivation activity who has committed the agency to helping find a solution.

Busey added that a healthy general aviation industry is vital to aviation's future.

A slow down in the growth of general aviation could eventually to a "reduced supply of new pilots that our commerical operators, businesses and airlines will need to serve rising demand in future years.

Busey emphasized that FAA's concern for the general aviation industry is one of the reasons for holding a separate General Aviation Forecast Conference.

The Administrator said with each succeeding year, it costs more to buy an airplane, insure it, maintain it, and put fuel in it.

"Our figures show that it costs 83 percent more to operate a single-engine piston plane today than it did 12 years ago, and it wasn't cheap then."

Maintaining Instrument Approaches: It's not as easy as it looks

Have you ever wondered who does the maintenance on the non-federally owned navigation equipment at airports? It's not the FAA.

In fact, there are over 1400 non-federally owned facilities associated with the National Airspace System. These facilities are used with instrument flight rules and consist of localizers, simplified directional finders, very high frequency omnirange (VOR), glide slopes, marker beacons, nondirectional radio beacons (NDB), and automatic weather observation systems (AWOS).

There are also non-federal facilities that are used with visual flight rules (VFR). These facilities may have visual approach slope indicators (VASI), air traffic control towers, and remote communication facilities. These non-federally owned facilities are owned by individuals, companies, cities, local airport authorities, counties, and states. As such, they are regulated and are under strict supervision by the FAA.

MilerTronics is one of a handful of companies in the Southeast with personnel certified for non-federal localizers and glide slopes.

Located in Greenville, MilerTronics has been performing NAVAID maintenance for seven years, and covers North Carolina, Georgia, eastern Tennessee, Florida as well as South Carolina.

The technicians who work on the NAVAID equipment have been verified by the FAA for each piece of equipment and must have already passed the Federal Communications Commission General Radiotelephone Operator License before they are certified on specific pieces of equipment.

What determines if an airport facility is federal or non-federal? IFR traffic count. Most of the non-federal facilities do not have airline traffic. Therefore, their traffic count is not sufficient to justify FAA installation and maintenance of equipment. When this is the case, the authority governing the airport must pay for, install, and maintain the equipment. There are numerous federal and state programs that aid in the financing of this equipment, including the Aeronautics Commission.

When equipment is first installed at the non-federal facility and the technicians have been verified, the FAA representative along with the non-federal maintenance technician does a ground inspection of the facility. The FAA then requests a flight inspection. When the equipment passes the flight inspection, the FAA issues a commissioning NOTAM (notice to airmen). The facility is commissioned for instrument flight rules effective the date of the instrument approach publication.

After commissioning, some of the equipment requires a monthly inspection. Simple equipment such as an NDB requires quarterly inspections. Periodically, the FAA flight checks the equipment. Depending on the type of equipment located at a facility, the FAA either does an annual or semi-annual inspection.

The newer NAVAID equipment with remote maintenance is computerized. If this computerized equipment detects any problem with the NAVAID equipment, it will use its modem to call maintenance and print out the problem it has detected. This remote maintenance monitoring capability saves the NAVAID sponsor downtime and money by greatly reducing the number of physical trips to the airport facility.

Wyatt Miler climbs a glide slope tower to check obstruction lights at Donaldson Center Airpark while George Miler assists.

MilerTronics also maintains the communications equipment at the Anderson AFSS (Automated Flight Service Station). This flight service station provides all pilot pre-flight and in-flight briefings for South Carolina.

During thunderstorm season or during the winter months when there is ice, the equipment is sometimes disabled. In the case of the Anderson AFSS, technicians are required to be on the site within 2 hours after the call comes from the FAA. For NAVAID maintenance, the technician first tries to get the equipment to function by remote maintenance through computer modems. If this fails, the company twin-engine comes out of the hangar and flies to the site where the technicians remain until the equipment is returned to service.

Maintaining your NAVAIDs isn't as easy as it looks.

Columbia Airway Facilities Sector--Simply the Best

Continued from Page 1

dous dedication of those workers and said cooperating during trying times is what separates people from other regions from the South.

"During staffing cuts in the nation, where fewer people have to do more with less, the Columbia Sector has overcome that. It's a trait of the South we call can be proud of."

"This award doesn't surprise me," said Waddle, "When the ILS was shut down for several months (at the Columbia Metro) there were no glitches and we had such wonderful cooperation."

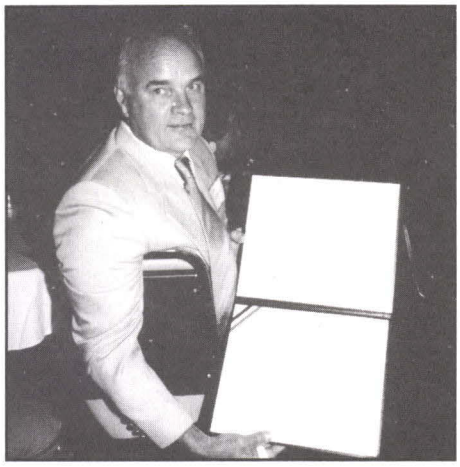
Another speaker was Bob Patterson, Columbia Air Traffic manager who retired shortly after Hurricane Hugo. He reminded the audience of the great sacrifices during Hugo which many thought would go unnoticed.

Patterson said daily living, getting to work and providing electricity to the airports, were monumental problems during the time.

He praised his "FAA family" for their efforts in working together as a team with other agencies and organizations during the natural emergency.

FAA's Regional Administrator Cas Castleberry pulled out all the stops when he acknowledged the staff. "You're leading the world in all that you do," Castleberry said, "I've been to South America many times and each time I see that they are trying to catch up to our technology."

Castleberry said the daily routine of the sector greatly contributed to their outstanding performance, "I see so many good people doing a great job day after day and that's what makes your sector so remarkable."



James Wilkins proudly shows his FAA certificates, personalized coffee mug and his FAA lapel pin.

Few organizations can boast they are the nation's best, but when the Columbia Airway Facilities Sector says it, they really mean it.

Cellular Telephones & Aircraft May Not Mix

Continued from Page 1

interference with calls in adjacent systems over a wide area as well. Telephone interference is only part of the problem.

For airmen, the more serious problem with using a cellular telephone in flight is the possibility that its transmission can interfere with an aircraft's communication or navigation equipment.

Recently, there have been reports of air carrier and business aircraft having erratic communication and navigational equipment problems that have been traced to the use of cellular telephones in the aircraft. In some cases, personal computers have caused similar problems.

In the case of an air carrier or commercial aircraft, the flight crew may not even be aware a passenger is using a cellular telephone or computer.

Obviously, the pilot of a small aircraft should know if a passenger is using either type device. Or a pilot may use a cellular telephone without being aware of the potential problem.

All pilots should review FAR 91.21titled, "Portable electronic devices," to find out what the FAA rules are on such devices. The FAR does not prohibit the airborne use of a cellular telephone, which is a FCC function, but it does prohibit the operation of any portable electronic device that can interfere with the communication or navigation equipment on an aircraft operated by an air carrier, commercial operator, or any aircraft operated IFR. The FAR lists the types of portable electronic equipment exempt from the rule.

The FAR also defines who has the authority to determine if the device causes interference, and if the device does cause interference, who has the authority to prohibit its use during flight. In the case of an air carrier or commercial operator, the operator makes the determination. The pilot in command or operator makes the determination in other types of aircraft.

All pilots need to remember that certain types of electronic equipment not designed and FAA approved for aircraft use can interfere with an aircraft's electronic system. The fact the FAA does not prohibit the use of the equipment in an aircraft does not mean the equipment is safe to operate in an aircraft. The pilot in command may decide that the only completely safe way to avoid a problem is not to use either a cellular phone or portable computer while in flight. Under FAR 91.21, only the aircraft's operator or pilot can determine if an aircraft can be operated safely with portable electronic devices being used.

This article is reprinted courtesy of FAA Aviation News.

FYI From the FAA

Time In Your Tanks: Fuel Management Tips

How to determine the "Time In Your Tanks"

•Maintain accurate flight time, power setting, and refueling records for each trip.

•Be conservative, figure your flight time from start up to shut down.

•Reasonably accurate fuel consumption rates (in gallons per hour) can be computed after a few flights under similar operating conditions.

•The amount of usable fuel for your aircraft may be found in the Pilot's Operating Handbook.

•Multiply the usable fuel on board your aircraft by 75 percent and divide the result by your previously confirmed consumption rate. This will be your SAFE FLIGHT TIME limit for the aircraft. Resolve never to exceed it.

•When you are familiar enough with your aircraft to know exactly how much time is in your tanks, plan to land with at least 45 minutes of reserve fuel on board. Anything less could compromise safety.

MORE TIPS ON FUEL MANAGEMENT

•Compute a reasonable time limit for your aircraft.

•Factors to be considered in planning each flight:

➔ Trip length

➔ Cruise Altitude

➔ Wind—don't count on forecast tailwinds, they can change.

➔ The number of passengers (weights plus baggage).

➔ Inflight endurance of persons on board.

➔ Resolve not to exceed the time limit you establish.

➔ Estimate your "ETA" for each checkpoint.

▲Be aware of your actual progress and think about landing at an alternate if you are running behind your estimated "ETA."

•Use the grade of aviation gasoline specified by the manufacturer for your aircraft. Use the next higher grade when the specified grade is not available.

•Never use automotive gasoline or aviation gasoline of a lesser grade than that specified by the engine manufacturer.

•Visually check the color and cleanliness of the fuel in your aircraft by draining the fuel sumps and strainers after each fueling and during preflight inspection.

•Do not assume your fuel quanity and quality to be correct. Check it.

•Know the fuel system of your aircraft and never operate a system selector without visually checking the position.

•Fuel guages are subject to malfunctions and errors. Therefore, unless restricted by the gross weight or center of gravity limits, it is considered good judgment to "top off" the tanks at fuel stops. If the fuel load must be limited, an accurate measurement can be made by use of a dipstick calibrated for the aircraft.

•Condensation occurs in partially filled tanks when not in use. Filling the tanks at the completion of the trip will reduce the probability of fuel contamination or condensation.

•Do not reposition the fuel selector just before takeoff or landing.

•Know why you should lean the fuel mixture:

▲To improve engine efficiency and increase airspeed.

▲To provide smoother engine operation.

▲To provide greater fuel economy and longer range of operation—That's a safety factor.

▲To provide longer spark plug life with less fouling.

▲To reduce maintenance costs.

•Know when you should lean the fuel mixture:

▲Normally aspirated engines: Lean any time the setting is 75 percent or less. Use full rich for full throttle operation at 5,000 feet density altitude and below.

▲Turbocharged engines: Always use full rich for takeoff regardless of altitude. Lean at cruise as recommended by the manufacturer only.

•Know how to adjust mixture setting for high altitude takeoff and landing.

▲Lean to maximum RPM for carburetor engines.

▲Lean to proper fuel flow and fuel pressure settings for injected engines.

▲Lean before entering the traffic pattern to ensure maximum power for go around.

•Enrich the mixture for descent as required ONLY.

▲Enrich enough to keep the engine running smoothly.

▲Go to full rich when in the traffic pattern (or as required when landing at high elevations).

REMEMBER—

"A TANK FULL OF FUEL IS ONLY A TANK FULL OF TIME"

For more information on fuel management consult your local FAA Flight Standards Office.

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This Month...

Inside Palmetto Aviation

...and much much more!

14th S.C. Airports Conference
Creating Tomorrow's Airports Today

Conference slated for November 13,14 and 15 in Charleston

The 1991 South Carolina Airports Conference is getting ready for you!

You are the only ingredient missing to make this year's 14th Airports Conference a success. Start planning now to attend the conference in Charleston on November 13-15.

The 1991 Conference will feature a change of scenery from Myrtle Beach. This year's conference will be in beautiful, historic Charleston at the Downtown Sheraton Hotel on Lockwood Blvd. The hotel is giving us $65 room rates for both double and single occupancy.

The conference will feature some compelling topics and interesting sessions that will highlight our theme: **Creating Tomorrow's Airports Today.**

Aviation leaders and policy-makers will present their ideas on the future of aviation and industry movers and shakers will show us the way South Carolina can get there.

You won't want to miss our old favorites like the FBO roundtable and the FAA and State questions and answer sessions.

Soon you will be receiving your full registration packet with a hotel reservation card, but you can make your reservations now by calling the Sheraton directly at (803) 723-3000. Don't forget to tell them you're with South Carolina Airports Conference to get discounted rates.

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